# Case study comparisons of LAPS, STMAS and other analyses

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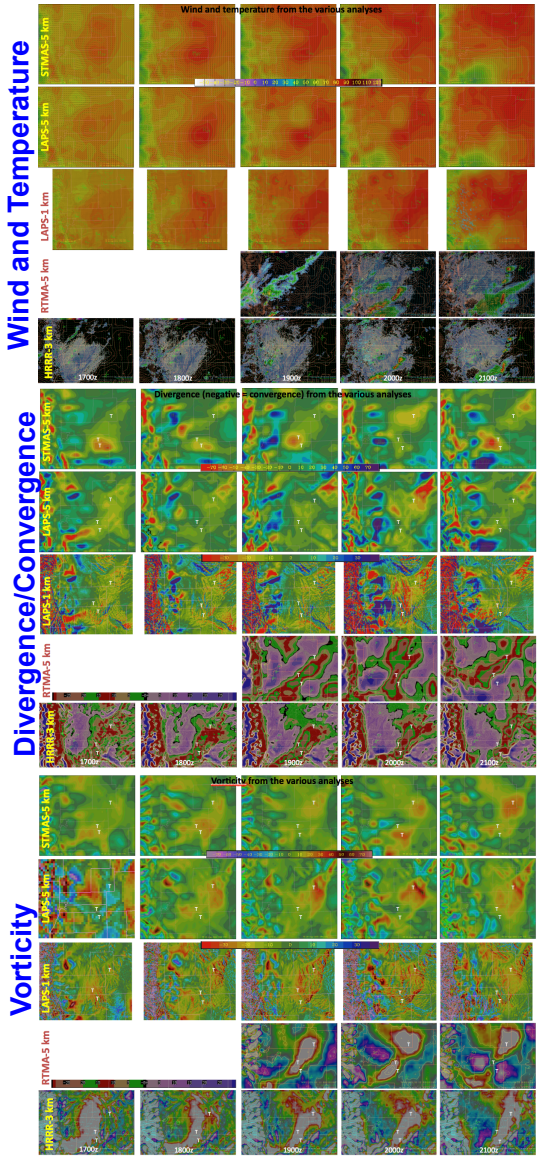
## 16 August 2010 DCVZ/tornado case

This case combines a stationary boundary (DCVZ) with smaller-scale outflows. Analysis comparisons below.

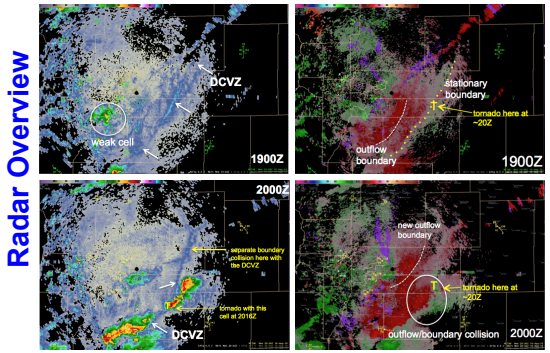


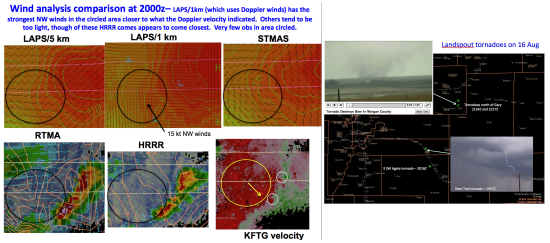

## Overview

Part of our development of the newer versions of LAPS and STMAS involves examining individual cases subjectively as a forecaster would do. On this poster we compare:

- Conventional LAPS (5 km on the horizontal grid)
- LAPS hi-resolution (1 km)
- STMAS (5 km version)
- STMAS (2 km)
- RTMA (at 5 km, now down to 2.5 km)

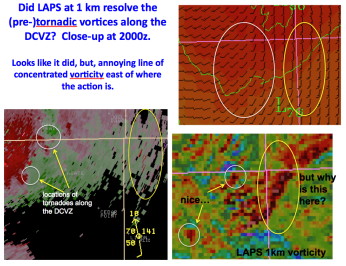
## 16 August 2010 case – more details




### Summary of this case:

- Clear differences as a result of resolution
- Increasing convergence and cyclonic vorticity along the DCVZ
- Details of the smaller-scale outflows better captured by LAPS at 1 km resolution.




## 22 October 2010 comparisons - Upper low right over area with complex flow and boundaries